

WHAT IS CLAIMED IS:

1. A blood plasma lipids in-vitro filtering method, comprising the following steps:
separating blood plasma from collected blood;
carrying out flushing with saline solution;
controlling temperature and pressure of the blood plasma;
passing the blood plasma to screening procedure for filtering; and
feeding the blood plasma back to the blood after the filtering step.
2. The method as claimed in Claim 1, wherein the separating step comprises a stepwise separation process for separating the blood plasma at about 150-250 milliliters of blood plasma each time.
3. The method as claimed in Claim 1, wherein the blood plasma passes to the screening procedure at a speed of 20-30 milliliters per minute.
4. The method as claimed in Claim 1, wherein in the screening procedure, pressure is controlled below 60KPa.
5. The method as claimed in Claim 1 further comprising a step of making temperature of the blood plasma approximately equal to body temperature.
6. The method as claimed in Claim 1, wherein the screening procedure comprises three films, of which a first film is membrane that has filter aperture pores of about 0.3 to 0.65 microns and comprises a lipid absorptive material, a second film is a membrane that has filter aperture pores of about 0.3 microns, and a third film is a membrane that has filter aperture pore of about 0.2 microns and comprises nylon as a base material.
7. The method as claimed in Claim 6, wherein at least one first film is interposed between the second and third films.
8. The method as claimed in Claim 6 or 7, wherein the lipid absorptive material comprises silicon oxide pellets.
9. An in-vitro blood plasma lipids screening procedure comprising: a blood collecting device, a blood separating device, a pre-filtered blood plasma bag, a blood lipids screening procedure, a post-filtered blood plasma bag, and a blood plasma feedback device, which are connected via tubes, and the tubes being also connected with a peristaltic pump, pressure and temperature control devices being installed among the tubes, the in-vitro blood plasma lipids screening procedure further comprising saline solution treatment bag

and waste saline solution bag, the saline solution treatment bag being connected to an outlet of the pre-filtered blood plasma bag, and the waste saline solution bag being connected to an entrance of post-filtered blood plasma bag.

10. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the pre-filtered blood plasma bag comprises an automatic weight/volume detection device, which selectively transmits a signal indicating that the blood plasma bag is full to the blood separating device and the blood collecting device, thereby triggering a stop response.
11. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the pre-filtered blood plasma bag has a volume of about 150-250 milliliters.
12. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the pressure control device reads out a current pressure inside the tube.
13. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the peristaltic pump is controlled to have a rotational speed that induces a flow rate of the blood plasma at about 20-30 milliliters every minute.
14. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the pressure control device controls the pressure to be below 60KPa.
15. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the temperature control device is installed in the screening procedure.
16. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the temperature control device is operable to have a highest heating temperature at 38°C.
17. The in-vitro blood plasma lipids screening procedure as claimed in Claim 9, wherein the blood lipids screening procedure comprises three films of which a first film is a membrane which has filter aperture pore of about 0.3 to 0.65 microns and comprises a lipid absorptive material, a second film is a membrane which has filter aperture pore of about 0.3 microns, and a third film is a membrane which has filter aperture pore of about 0.2 microns and is made of nylon as a base material.
18. The in-vitro blood plasma lipids screening procedure as claimed in Claim 17, wherein at least one first film is interposed between the second and third films.
19. The in-vitro blood plasma liquids screening procedure as claimed in Claim 17 or 18, wherein the lipid absorptive material comprises silicon oxide pellets.

- 20.** An application of the in-vitro blood plasma lipids screening procedure in treating apoplexy and stroke related cases.